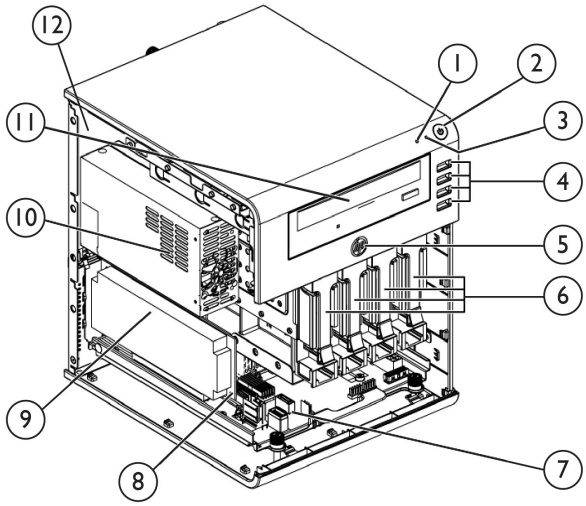
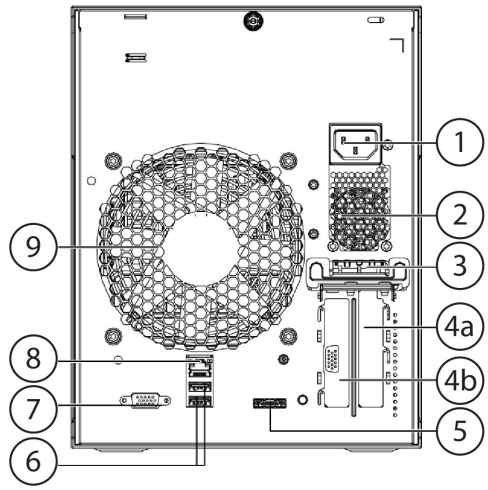
Overview





Front View:

1. NIC LED
2. Power Button
3. HDD LED
4. USB Ports
5. Health LED
6. Hard Drive Bays
7. System Board
8. Remote Access Card slot
9. PCIe slot
10. Power Supply
11. Optical Drive Bay
12. Front view drawing is for reference only. The side panel is not removable.

Rear View:

1. Power Supply Outlet
2. PSU Fan
3. PCI Holder

4a. PCI Bracket 1

4b. PCI Bracket 2

5. e-SATA Connector
6. USB 2.0 Ports
7. VGA Port
8. Embedded NIC Port
9. Rear System Fan

Overview

At A Glance

- Processor:
  - AMD Athlon™ II NEO N36L
  - AMD RS785E/SB820M chipset
- Memory:
  - Two (2) DIMM slots
  - 1GB (1x1GB) Standard/8GB Maximum, using PC3-10600E DDR3 Unbuffered (UDIMM) ECC memory, operating at max. 800MHz
- Storage Controller:
  - Embedded AMD SATA controller with RAID 0, 1
  - Embedded AMD eSATA controller for connecting external storage devices via the eSATA connector in the rear of the server
- Storage Drive Support:
  - 4 Internal HDD Support
  - Maximum internal SATA storage capacity of up to 8.0TB (4 x 2TB 3.5" SATA drives)
- Network Controller:
  - Embedded NC107i PCI Express Gigabit Ethernet Server Adapter
- Expansion Slots:
  - Slot 1: PCI-Express Gen 2 x16 connector with x16 link
  - Slot 2: PCI-Express Gen 2 x1 connector with x1 Link
  - Slot 2-2: PCI-Express x4 slot for optional management card
- USB 2.0 Ports:
  - Seven (7) USB 2.0 ports: 4 front , 2 rear, 1 internal (for tape)
- Power Supply:
  - 150 Watts Non-Hot Plug, Non Redundant Power Supply
- Management:
  - Optional MicroServer Remote Access Card
- Operating System:
  - Supports Windows and Red Hat Linux
- Form Factor:
  - Ultra Micro tower
- Warranty:
  - This product is covered by a global limited warranty and supported by HP Services and a worldwide network of HP Authorized Channel Partners. Hardware diagnostic support and repair is available for one year from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HP Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.
    NOTE: Server Warranty includes 1 year Next Day Parts replacement, 0-Years Labor, 0-Years Onsite support. Additional information regarding worldwide limited warranty and technical support is available at: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.

Standard Features

Processor	**Dual-Core Processor** AMD Athlon II Processor Model NEO N36L (1.30 GHz, 15W, 2MB)	
Cache Memory	2x 1MB Level 2 cache	
Chipset	AMD RS785E/SB820M	
Memory Protection	ECC	
Memory	Type	PC3-10600E unbuffered DDR3 ECC operating at 800MHz
	Standard	1GB (1x1GB)
	Maximum	8 GB
Network Controller	Embedded NC107i PCI Express Gigabit Ethernet Server Adapter	

Expansion Slots #	Technology	Bus Width**	Connector Width	Bus Number*	Form Factor	Notes
1	PCI-e	x16	x16	1h	Half height, half length slot	
2	PCI-e	x1	x1	2h	Half height, half length slot	

* Default bus assignment (in decimal). Inserting cards with PCI bridges may alter the actual bus assignment number.
** Indicates the number of physical electrical lanes running to a PCI-e connector.

Storage Controller	Integrated SATA controller with embedded RAID (0, 1) NOTE: Embedded RAID setup instructions are located in the MicroServer User Guide.	
Storage	Optical Drive	Optional: Half-Height SATA DVD or DVD-RW drive
	Hard Drives	1x250GB NHP SATA 7200 rpm Drive
Maximum Internal Storage	**Non-Hot Plug SATA**	8TB (4 x 2TB) 3.5" SATA

Standard Features

Interfaces	Graphics	On board VGA
	USB 2.0 Ports	7 total (2 rear, 4 front panel, 1 internal)
	Network RJ-45 (Ethernet)	1 (10/100/1000 bits/s)
	eSATA Gen 2	1 rear
Graphics	128MB shared supporting 1920x1200 @ 60Hz	
Form Factor	Ultra Micro Tower	
Industry Standard Compliance	ACPI V2.0 Compliant PCI 2.3 Compliant PXE Support WOL Support IPMI 2.0 compliant USB 2.0 SATA Gen 2	
Security	Setup password	
Security - TPM	The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys. Windows® BitLocker™ Drive Encryption (BitLocker) is a data protection feature available in Windows Server® 2008. BitLocker leverages the enhanced security capabilities of a Trusted Platform Module (TPM) version 1.2. The TPM works with BitLocker to help protect user data and to ensure that a server running Windows Server 2008 has not been tampered with while the system was offline. NOTE: For more information about TPM, including a white paper, go to: www.hp.com/go/TPM NOTE: The TPM key is unique to every TPM deployed server and must be retained. Misplacing or losing the key could result in data loss.	
Server Power Cords	7 country specific, lowline NEMA power cord.	
Power Supply	150 Watts Non-Hot Plug, Non redundant Power Supply	
System Fans	One (1) - Non-redundant system fan shipped standard	

Standard Features

Operating Systems	Microsoft Windows Server Red Hat Enterprise Linux (RHEL) NOTE: For more information on HP's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server, please visit our Support Matrix at: http://www.hp.com/go/supportos and our driver download page http://www.hp.com/support/microserver.

Service and Support

For increased uptime, productivity and ROI -HP Care Pack packaged services for Servers

These days, you need to get the most out of your server investment-you can't afford not to. When you buy HP server products and solutions, it's also a good time to think about what levels of service and support you may need. To help take the worry out of deploying, designing, maintaining, and managing your environment, we've designed a portfolio of service options that are as: flexible, reliable and scalable as your server. Unlike server-only vendors, we take a holistic approach to your entire environment, bridging storage, servers, blades, software and network infrastructures with our HP Care Pack packaged services for Servers.

HP Care Pack Services: Upgrading or extending standard server and storage warranties cost effectively

HP Care Pack Services offer a standard reactive hardware and software support services suite sold separately, or combined with our Support Plus and Support Plus 24 services. The portfolio also provides a combination of integrated proactive and reactive services, such as Proactive 24 Service and Critical Service. In addition with HP Proactive Select, you can acquire the specific proactive constancy and technical services. HP Proactive Select menu offers a broad set of service options that you can mix and match depending on your specific requirements. Proactive service options include offers for server, storage, network, SAN device, software, environment and education services.

HP server and storage lifecycle support services offer a full spectrum of customer care-from technology support to complex migrations to complete managed services. HP Factory Express provides customization, integration and deployment services for turnkey solutions. HP Education Services offer flexible, comprehensive training on to help your IT staff get the most out of your server and storage investments. HP Financial solutions extend innovative financing and cost-effective asset management programs-from purchase to equipment retirement.
Learn more: www.hp.com/services/servers and www.hp.com/services/storage

NOTE: Care Pack Services availability may vary by product and country.

HP Care Pack Services are sold by HP and HP Authorized Service Partners:

- Services for customers purchasing from HP or an enterprise reseller are quoted using HP order configuration tools.
- Customers purchasing from a commercial reseller can find HP Care Pack Services at http://www.hp.com/go/lookuptool

Recommended HP Care Pack Services for optimal satisfaction with your HP product

Recommended Services

3-Year HP Hardware Support Onsite Service, 4-hour response, 13x5

Delivers increased equipment availability and productivity with rapid remote support and onsite response for your HP server and storage hardware.

The benefits include:

- Help improve or maintain system uptime
- Convenient onsite support
- Committed response time

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE

3-Year HP Hardware Support Onsite Service, Next-day response (9x5)

Provides high-quality remote assistance and onsite support for your covered hardware, helping you to improve product uptime.

The benefits include:

- Help improve or maintain system uptime
- Convenient onsite support
- Reliable response time

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE

HP ProLiant Server Hardware Installation

Provides for the basic hardware installation of HP branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.

- Expedited installation, with all service prerequisites met before the installation is performed
- Installation in accordance with manufacturer's specifications, enhancing the supportability of your HP-installed hardware and software
- Service delivery at a mutually scheduled time
- Allows your IT resources to stay focused on their core tasks and priorities
- Availability of an HP service specialist to answer questions during the onsite delivery of this service

http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN

Optional HP Care Pack Services that will enhance your HP product experience

Optional Services

3-Year HP Hardware Support Onsite Service, 4-hour response, 24x7

As an alternative to our recommended support level, for customers who need same day response service level 24x7.

Provides you with an HP authorized representative who will arrive at the Customer's site any time and day of the year to begin hardware maintenance service within 4 hours of the service request being logged.

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE

3-Year HP Hardware Support Onsite Call-to-Repair (CTR) Service, 6- or 24-hour

As an alternative to our recommended support level, for customers who need committed call-to-repair for server hardware.

Provides your IT manager with a team of support specialists who will quickly begin troubleshooting the system to help return the hardware to operating condition within 6 or 24 hours of the initial service request to the HP Global Solution Center.

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EN.pdf

HP Proactive Select Service

Customer needs on demand access to consulting, technical proactive services and education courses. Provides a flexible way to purchase HP best-in-class consultancy and technical services. You can buy Proactive Select Service Credits when you purchase your hardware and then use the credits over the next 12 months.

http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-3842ENN

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eSupport

HP eSupport is a portfolio of technology-based services that assist you with managing your business environment - from the desktop to the data center.

Support Portal
The HP support portal provides one-stop access to the information, tools and services you need to manage the daily operations of your IT environment.

Features include:

- Access to self-solve tools (including search technical knowledge base)
- Efficient logging and tracking of support cases
- Collaboration with other business and IT professionals
- Download of patches and drivers
- Access to diagnostic tools
- Proactive notification of relevant information

Service and Support

Customer Technical Training	HP Education Services In today's cost-conscious business environment, IT professionals, developers, consultants and users face an interesting challenge: how to keep up with the latest technologies and expand important skills while delivering profitable results on current projects. To help address this challenge, HP offers innovative training solutions that help keep you up-to-date on virtualization, server, storage, Insight Control, Citrix, Microsoft® and open source/Linux-related topics-while spending less time away from business-critical activities.
HP Services Awards	HP Services continues to be recognized for service and support excellence by customers, partners, industry organizations and publications around the world. Recent honors and award reflect our services team's dedications, technical expertise, professionalism and uncompromising commitment to customer satisfaction.
Additional Services Information	To learn more on HP ProLiant servers and HP BladeSystem, please contact your HP sales representative or HP Authorized Channel Partner, or visit: www.hp.com/services/proliant or www.hp.com/services/bladesystem

SATA Models

NOTE: Not all models are available in all regions. Check with your local country HP offices for availability.

HP Micro N36L NHP 250GB US Svr 633724-xx1	Processor	(1) AMD Athlon™ II NEO N36L processor (1.3 GHz, 15W, 2MB)
	Cache Memory	2x 1MB Level 2
	Memory	1GB (1 x 1GB) PC3-10600E DDR3 UB ECC
	Network Controller	Embedded NC107i PCI Express Gigabit Ethernet Server Adapter
	Storage Controller	Embedded SATA Controller with Embedded RAID (0, 1)
	Hard Drive	1x250GB Non-hot plug LFF SATA
	Internal Storage	Non-Hot Plug SATA 4.0TB (4 x 1TB) Maximum
	Optical Drive	None ships standard
	Power Supply	150W Non-Hot Plug, Non-Redundant Power Supply
	Form Factor	Ultra Micro Tower

Country Code Key	xx=00	US
	xx=01	Australia
	xx=20	Brazil
	xx=29	Japan
	xx=37	APD
	xx=42	Europe
	xx=AA	PRC

Core Options

HP Memory	HP 4GB (1x4GB) Dual Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	593923-B21
	HP 2GB (1x2GB) Dual Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	593921-B21
	HP 1GB (1x1GB) Single Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	500668-B21
	NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: www.hp.com/go/ddr3memory-configurator.	
HP Optical Drives	HP Half-Height SATA DVD-RW Optical Kit	624192-B21
	HP Half Height SATA DVD ROM Optical Kit	447326-B21
HP Hard Drives	NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components. NOTE: Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.	
	SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives	
	HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	507774-B21
	HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	507772-B21
	HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	458941-B21
	SATA Non-Hot Plug LFF (3.5-inch) Entry (ETY) Drives	
	HP 250GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Entry 1yr Warranty Hard Drive	571232-B21
	HP 160GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Entry 1yr Warranty Hard Drive	458947-B21
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13021_div/13021_div.html (Worldwide)	
HP Networking	HP NC112T PCI Express Gigabit Server Adapter	503746-B21
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information: www.hp.com/go/ProLiantNICs	

Additional Options

HP Remote Management	MicroServer Remote Access Card	615095-B21
HP Security (TPM)	HP Trusted Platform Module Option Kit www.hp.com/go/TPM	488069-B21
HP Backup & Recovery Software	**Data Protector Express**	
	HP Data Protector Express V5.0 for 1 Server E-LTU	TC330AAE
	NOTE: To see available options: http://www.hp.com/go/dataprotectorexpress	
HP Tape Backup	NOTE: For the complete range of StorageWorks tape drives, autoloaders, libraries and media see: http://www.hp.com/go/tape. For hardware and software compatibility of HP StorageWorks tape backup products see: http://www.hp.com/go/connect.	
	HP StorageWorks DAT 40 USB Internal Tape Drive	DW022A
	HP StorageWorks DAT 72 USB External Tape Drive	Q1523B
HP Disk Backup	NOTE: For the complete range of StorageWorks RDX drives and media see: http://www.hp.com/go/rdx	
	USB Removable Media RDX Disk Backup Systems	
	HP StorageWorks RDX320 External Removable Disk Backup System	AJ768A
	HP StorageWorks RDX320 Internal Removable Disk Backup System	AJ767A
	HP StorageWorks RDX160 External Removable Disk Backup System	AJ766A
	HP StorageWorks RDX160 Internal Removable Disk Backup System	AJ765A
HP Uninterruptible Power Systems	**HP Tower - UPS**	
	HP T750 G2 UPS, NA	AF446A
	HP T750 G2 UPS, INTL	AF447A
	HP T750J UPS, Japan	AF456A
	NOTE: For additional information please go to: http://www.hp.com/go/rackandpower (Worldwide) NOTE: Please see QuickSpecs for Technical Specifications and additional information: http://h18004.www1.hp.com/products/quickspecs/13160_div/13160_div.html NOTE: For additional information on sizing your server, please reference: http://www.upssizer.com	
HP USB and SD Options	HP USB-P/S2 Optical Mouse	DC369A
	HP USB Standard Keyboard	DT528A#ABA
	HP External USB CD/DVD R/RW Drive	FS943UT

Additional Options

HP Care Pack Services	HP 3y Next Business Day MicroServer HW Support	UR482E
	HP 3y 4h 13x5 MicroServer HW Support	UR483E
	HP 3y 4h 24x7 MicroServer HW Support	UR484E
	HP 4y Next Business Day MicroServer HW Support	UR496E
	HP 4y 4h 13x5 MicroServer HW Support	UR498E
	HP 4y 4h 24x7 MicroServer HW Support	UR500E
	HP 5y Next Business Day MicroServer HW Support	UR502E
	HP 5y 4h 13x5 MicroServer HW Support	UR504E
	HP 5y 4h 24x7 MicroServer HW Support	UR506E
	HP 3y 24h 24x7 Call to Repair MicroServer HW Support	UR492E
	HP 3y 6h 24x7 Call to Repair MicroServer HW Support	UR494E
	HP Installation MicroServer Service	UR508E

NOTE: For more information, customer/resellers can contact: http://www.hp.com/services/carepack.

Memory

HP ProLiant Micro Server

Standard Memory
1GB (1x1GB) of PC3-10600E DDR3 UDIMM Memory kit installed

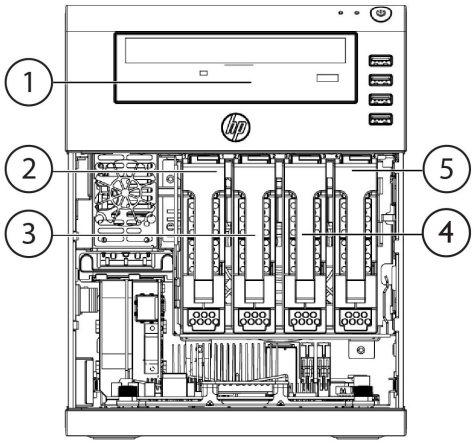
Standard Memory Replaced with Optional Memory
Up to 8GB of memory is available with the removal of the standard 1GB of memory and the optional installation of 2 x 4 GB PC3-10600E DDR3 UDIMM Memory kits.

NOTE: The below chart does not represent all possible memory configurations.

Memory		Slot	
		1A	2B
Standard	1 GB	1 GB	Empty
Optional	2 GB	2 GB	Empty
Optional	2 GB	1 GB	1 GB
Optional	4 GB	4 GB	Empty
Optional	4 GB	2 GB	2 GB
Maximum	8 GB	4 GB	4 GB

Following are memory options available from HP:

HP Memory	HP 4GB (1x4GB) Dual Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	593923-B21
	HP 2GB (1x2GB) Dual Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	593921-B21
	HP 1GB (1x1GB) Single Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	500668-B21



1	Optical Drive Bay
2, 3, 4, 5	Four (4) Non-Hot Plug Drive Bays

Drive Support

	Quantity Supported	Position Supported	Controller
Removable Media			
DVD Drive	1	1	Integrated SATA
DVD-RW Drive	1	1	Integrated SATA

Hard Drives (SATA Models only)

NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components.

NOTE: Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives

	Quantity Supported	Position Supported	Controller
2TB 3G SATA 7.2K 1TB 3G SATA 7.2K 500GB 3G SATA 7.2K	Up to 4	2-5	SATA controller with Embedded RAID on Motherboard (0,1)

SATA Non-Hot Plug LFF (3.5-inch) Entry (ETY) Drives

	Quantity Supported	Position Supported	Controller
250GB 3G SATA 7.2K 160GB 3G SATA 7.2K	Up to 4	2-5	SATA controller with Embedded RAID on Motherboard (0,1)

Maximum Storage Capacity

Internal	SATA	8.0TB (4 x 2TB)

Tape Drives and Disk-Based Backup

NOTE: For the complete range of StorageWorks tape drives, autoloaders, libraries and media, including the internal fitting models, see: http://www.hp.com/go/tape. For the complete range of StorageWorks D2D Backup Systems see: http://www.hp.com/go/d2d. For the complete range of StorageWorks RDX drives and media see: http://www.hp.com/go/rdx. For hardware and software compatibility of HP StorageWorks disk and tape backup products see: http://www.hp.com/go/connect.

	Position	Recommended Controller	Part Number
HP StorageWorks USB Tape Drives DAT 40 DAT 72	Internal External	USB 2.0 Port	N/A
HP StorageWorks USB RDX Removable Disk Backup System RDX160 RDX320	Internal or External	USB 2.0 port	N/A

Power Specifications

Part Number	630295-001					
Operational Input Voltage Range (Vrms)	100 to 127 and 200 to 240 V auto ranging					
Frequency Range (Nominal) (Hz)	50 to 60 Hz					
Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Max Rated Output Wattage Rating	150	150	150	150	150	150
Nominal Input Current (A rms)	N/A	3.5	N/A	2	2	N/A
Max Rated Input Wattage Rating (Watts)	191.4	N/A	N/A	N/A	184.9	N/A
Max. Rated VA (Volt-Amp)	N/A	N/A	N/A	N/A	N/A	N/A
Efficiency (%)	70%	70%	N/A	N/A	70%	N/A
Power Factor	N/A	0.9	N/A	N/A	0.9	N/A
Leakage Current (mA)	N/A	3.5	N/A	N/A	3.5	N/A
Maximum Inrush Current (A peak)	N/A	No component was damaged and input fuse shall not blow	N/A	N/A	No component was damaged and input fuse shall not blow	N/A
Maximum Inrush Current duration (mS)	N/A	N/A	N/A	N/A	N/A	N/A

To review typical system power ratings use the Active Answers HP Power Advisor which is available via the online tool located at URL: http://www.hp.com/go/hppoweradvisor

To drill down to calculators:
- Click on: "ProLiant Servers"
- Click on the Server of interest
- Click on: "Power Calculator" link. (You may need to scroll down to see it)

	Power**
HP ProLiant MicroServer Fully Configured	(see**)
Fully Loaded System output Wattage (W)	72.3 W
Fully Loaded System Input Current (A rms)	0.63A@115V; 0.35A@230V
Fully Loaded System Thermal (BTU- Hr)	115v@247.055; 230v@274.505
Fully Loaded System VA (Volt-Amp)	115v@72.45; 230v@80.5
System Leakage with all power supplies loaded (mA)	0.91
System Inrush Current with all power supplies loaded (A)	No component damaged
Power cord requirements	Nema 5-15P to IEC320-C13
	IEC320-C13 to IEC320-C14
	**Power shown is for a fully configured system consisting of (1) CPU, (2) double-sided DIMMs, (4) HDDs, (1) DVD-ROM, (1) PCIe X16 card & (1) PCIe X1 card and (1) power supply.

Power Cords	Power Cord Part Number
Country	
Australia	100661-001
Brazil	438723-001
Euro	100614-009
France	100614-009
Germany	100614-009
India	397138-002
Japan	139867-005
PRC	286496-001
Philippines/Thailand	285052-003
Taiwan	393312-001
UK	100613-008
US	121565-001

System Unit	**Dimensions** (HxWxD) (with feet)	10.5 x 8.3 x 10.2 in (26.7x 21.0 x 26.0 cm)	
	Weight (approximate)	Maximum (all hard drives, power supplies, and processors installed)	21.16 lb (9.6 kg)
		Minimum (one hard drive, power supply, and processor installed)	13.18 lb (5.98 kg)
	Input Requirements (per power supply)	Rated Line Voltage	100 -- 127 VAC, 200 - 240 VAC
		Rated Input Current	3.5 A (at 110 VAC), 2 A (at 200 VAC)
		Rated Input Frequency	47 to 63 Hz
		Rated Input Power	191.4 W (at 100 VAC), 184.9 W (at 200 VAC)
	BTU Rating	Maximum	247.055 BTU/hr (at 100 VAC), 274.505 BTU/hr (at 200 VAC)
	Power Specifications	To review typical system power ratings use the Power Advisor which is available via the online tool located at URL: http://www.hp.com/go/hppoweradvisor	
	Power Supply Output (per power supply)	Rated Steady-State Power	150 W (at 100 VAC), 150 W (at 200 VAC)
		Maximum Peak Power	200 W (at 100 VAC), 200 W (at 200 VAC
	System Inlet Temperature	Operating	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed. System performance may be reduced if operating with a fan fault or above 35°C (95°F).
		Non-operating	10 to 90% relative humidity (Rh), 28°C 5 to 95% relative humidity (Rh), 38.7°C
	Altitude	Operating	3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
		Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
	Acoustic Noise (Fully Loaded)	Idle L WAd	3.9 BELS

		L pAm	22.3 dBA
		Operating	
		L WAd	4.1 BELS
		L pAm	24.4 dBA
	Acoustic Noise (Lightly Loaded)	Idle	
		L WAd	3.7 BELS
		L pAm	21.3 dBA
		Operating	
		L WAd	3.8 BELS
		L pAm	22.0 dBA
	Emissions Classification (EMC)	FCC Rating	Class B
		Normative Standards	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

NOTE: Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.

HP 250GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Entry 1y Warranty Hard Drive	571232-B21	Capacity	250,059MB	
		Height Maximum drive dimension	1.028 in. (26.1 mm)	
		Width	4.0 in. (101.6 mm)	
		Depth Maximum drive dimension	5.787 in (147.0 mm)	
		Interface	Serial ATA	
		Transfer rate synchronous (maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek time (typical reads, including settling)	Single track	2.0 ms
			Average	11 ms
			Full-stroke	21.0 ms
			Rotational speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	488,397,168
		Operating Temperature	50° to 95° F (10° to 35° C)	

Embedded SATA controller	**SATA Protocol**	SATA 2, 3Gb/s
	SATA Ports	5 internal
	Port transfer rate	3Gb/s total
	Maximum Capacity	up to 8.0TB (4 x 2TB non-hot plug SATA HDD)
	RAID Levels Supported	RAID 1 (Mirroring) RAID 0 (Striping)
	Logical RAID Volumes Supported	NOTE: On SATA models with embedded RAID, setup instructions are located in the MicroServer User Guide

Embedded NC107i PCIe Gigabit Server Adapter	**Network Interface**	10Base-T/100Base-TX/1000Base-TX	
	Compatibility	IEEE 802.3 10Base-T	
		IEEE 802.3ab 1000Base-T	
		IEEE 802.3u 100Base-TX	
	Data Transfer Method	Single lane (x1), 100MHz PCI Express Reference Clock	
	Controller	BCM5723	
	Network Transfer Rate	10Base-T (Half-Duplex)	10 Mb/s
		10Base-T (Full-Duplex)	20 Mb/s
		100Base-TX (Half-Duplex)	100 Mb/s
		100Base-TX (Full-Duplex)	200 Mb/s
		1000Base-TX (Half and Full-Duplex)	2000Mb/s
	Connector	RJ-45 connector	
	Cable Support	10Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)
		10/100/1000Base-TX	Category 5 UTP; up to 328 ft (100 m)

Environment-friendly Products and Approach	**End-of-life Management and Recycling**	Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner. The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.